

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: LUMARK

Report Number: P966661

Luminaire Tested: **NAV-SB4C-735-U-AFL-HSS**

Issue Date: 1/21/2025

Test Information

Test Method: LM-79-08
Report Number: P966661
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2411-289-15)
Test Lab: INNOVATION CENTER
Issue Date: 1/21/2025
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: LUMARK
Catalog Number: NAV-SB4C-735-U-AFL-HSS
Description: NAVION ROADWAY AND AREA HIGH DENSITY LED LUMINAIRE
(4) 70 CRI, 3500K, 615mA LIGHTSQUARES WITH 26 LEDS EACH AND AUTOMOTIVE
FRONTLINE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26230.8 lumens
Efficiency: N/A
Efficacy: 130.7 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

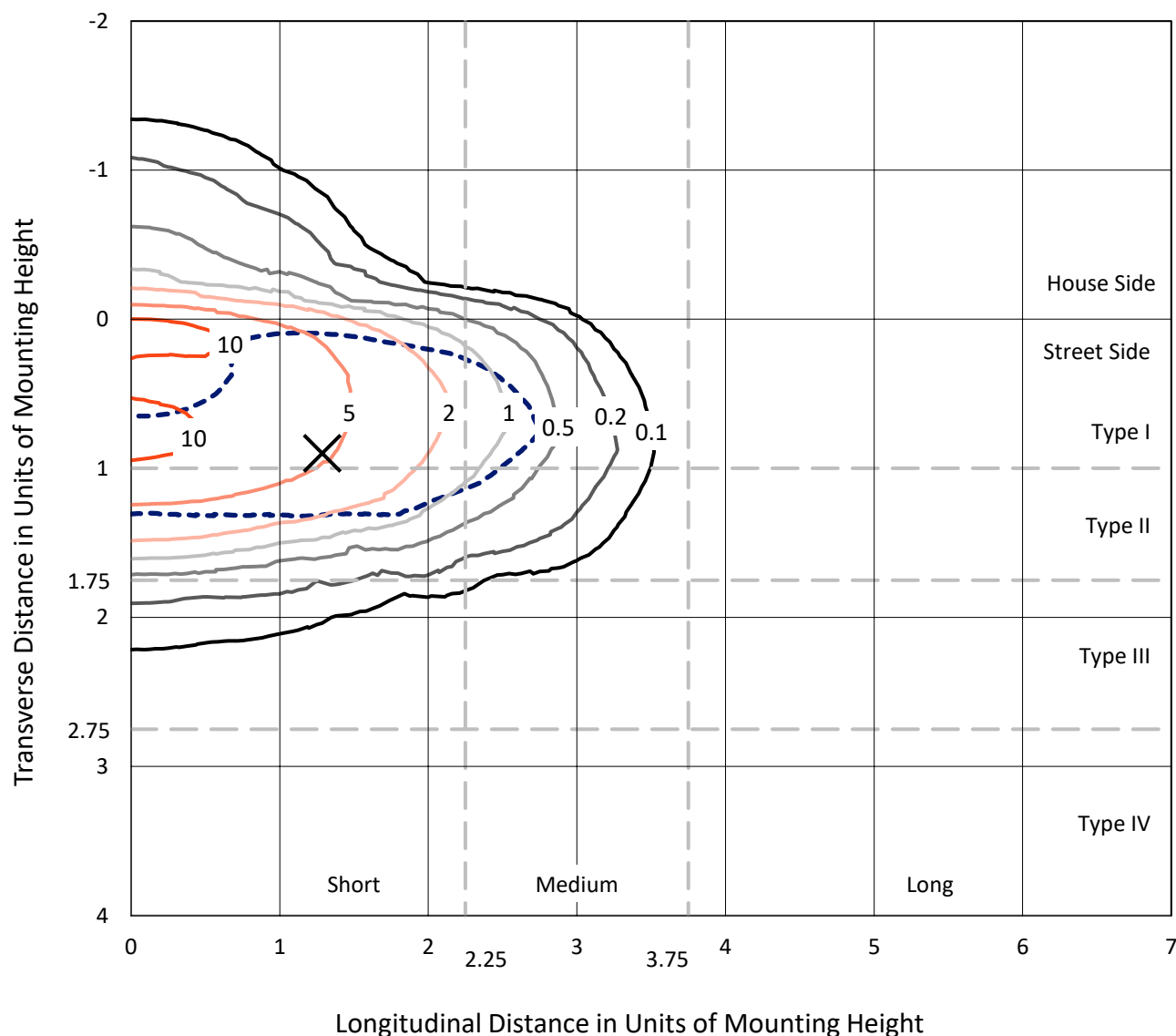
Input Watts (W): 200.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

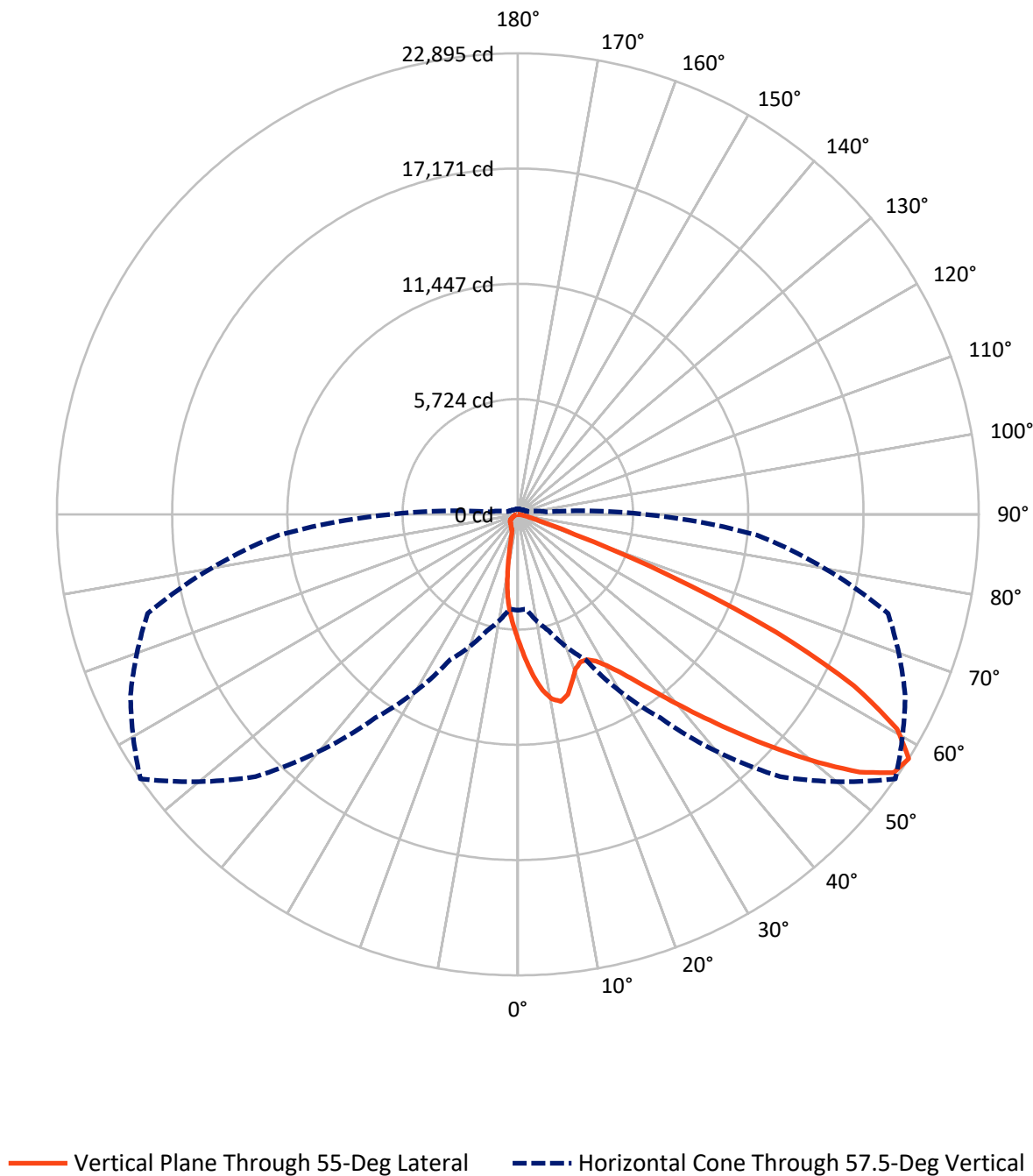
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 14.5 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2048.5	0.0	2048.5
	% Fixture	7.8	0.0	7.8
Street Side	Lumens	24182.3	0.0	24182.3
	% Fixture	92.2	0.0	92.2
Total	Lumens	26230.8	0.0	26230.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	588.1	2.2
10°-20°	1420.6	5.4
20°-30°	2273.0	8.7
30°-40°	3847.2	14.7
40°-50°	6316.3	24.1
50°-60°	6942.0	26.5
60°-70°	3981.9	15.2
70°-80°	813.6	3.1
80°-90°	48.0	0.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	26230.8	100.0
0°-180°	26230.8	100.0

Coefficient of Utilization



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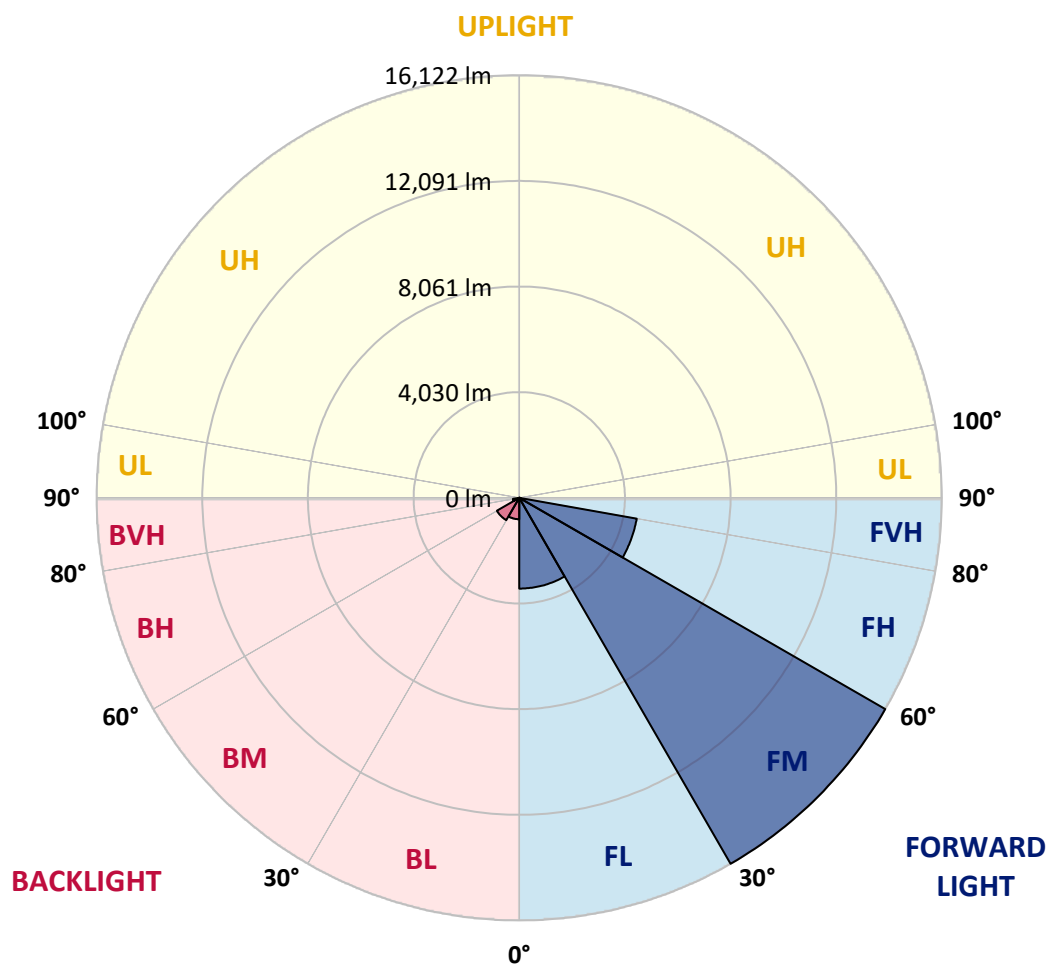
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3463.9	13.2			
FM	(30°-60°)	16121.6	61.5			
FH	(60°-80°)	4551.9	17.4			G2/5000
FVH	(80°-90°)	44.8	0.2			G1/100
BL	(0°-30°)	817.8	3.1	B2/1000		
BM	(30°-60°)	983.8	3.8	B1/1000		
BH	(60°-80°)	243.6	0.9	B1/500		G1/500
BVH	(80°-90°)	3.2	0.0			G0/10
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type II Short



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	6321.0	6321.0	6321.0	6321.0	6321.0	6321.0	6321.0	6321.0	6321.0	6321.0	6321.0
2.5°	7843.0	7744.3	7729.7	7710.4	7522.7	7382.0	7178.2	6955.0	6704.3	6448.8	6335.5
5°	9060.9	8983.3	8968.8	8878.1	8664.6	8425.3	8063.0	7605.2	7137.8	6587.9	6351.7
7.5°	9297.1	9282.5	9348.8	9345.5	9316.4	9127.2	8821.6	8276.5	7574.4	6759.3	6393.7
10°	8244.1	8281.3	8478.6	8651.7	9119.1	9390.8	9324.5	8875.0	8024.1	6955.0	6440.7
12.5°	7285.0	7241.3	7382.0	7577.7	8121.2	8929.9	9533.2	9374.8	8538.5	7176.6	6510.2
15°	6683.3	6665.5	6744.7	6835.3	7249.4	8064.6	9290.6	9780.7	9033.4	7438.6	6615.4
17.5°	6490.8	6476.3	6500.5	6523.1	6791.6	7422.4	8713.2	10029.7	9507.3	7737.8	6731.8
20°	6647.7	6628.3	6625.1	6607.3	6718.9	7149.1	8190.8	10047.6	9932.8	8009.6	6832.0
22.5°	7105.4	7082.7	7003.5	6932.4	6942.0	7186.3	7957.8	9869.6	10253.0	8263.6	6895.2
25°	7935.1	7897.9	7733.0	7493.6	7341.6	7445.1	7993.4	9635.1	10558.6	8462.5	6864.4
27.5°	8973.6	8925.1	8713.2	8357.3	8009.6	7883.4	8250.5	9473.4	10812.6	8614.5	6798.1
30°	9991.0	9927.8	9719.3	9442.6	8934.7	8536.9	8714.8	9544.5	11115.1	8773.0	6710.8
32.5°	11089.2	11029.3	10752.8	10409.9	9989.3	9454.0	9350.5	9892.3	11485.4	8994.6	6649.3
35°	12478.6	12384.8	11991.7	11524.3	11077.9	10536.1	10210.9	10492.3	11978.8	9332.6	6683.3
37.5°	14060.4	13934.3	13510.5	12865.2	12282.9	11676.3	11259.0	11317.2	12701.8	9785.6	6788.4
40°	15551.7	15436.9	15045.5	14437.3	13706.2	12970.2	12525.5	12396.0	13699.7	10337.1	6972.8
42.5°	16446.1	16342.7	16177.7	15920.5	15304.3	14553.8	13992.5	13712.7	14880.4	10997.0	7197.7
45°	16496.4	16405.7	16627.3	16926.5	16805.3	16305.5	15621.3	15108.5	16066.1	11616.5	7430.5
47.5°	15694.1	15632.6	16305.5	17350.3	17871.2	18081.4	17450.6	16387.9	17044.6	12061.3	7526.0
50°	13507.2	13484.6	14869.2	16787.4	18277.1	19637.4	19380.2	17578.3	17803.2	12291.0	7435.4
52.5°	11712.0	11629.4	12436.5	14985.6	17686.8	20455.8	21266.2	18746.1	18333.8	12334.6	7223.5
55°	8883.0	8810.2	9822.8	11970.7	15783.1	20164.7	22645.8	19951.2	18713.8	12223.0	6843.4
57.5°	4765.0	4719.7	5999.1	7967.5	12337.8	18417.8	22894.9	21225.7	19034.0	11927.0	6311.2
60°	1855.2	1847.2	2325.9	3865.7	7498.5	14984.0	21638.2	21990.8	19234.6	11563.1	5866.5
62.5°	1122.5	1146.8	1224.4	1735.5	3312.5	9308.4	18741.3	21120.5	19368.9	11229.9	5499.3
65°	928.4	930.0	939.7	1192.1	1586.7	3894.8	14108.9	18257.7	19037.3	10636.3	4978.5
67.5°	795.8	810.4	847.6	946.2	1119.3	1708.1	8122.8	14143.0	17020.3	9255.0	4166.5
70°	627.6	647.0	693.9	778.0	863.7	1069.2	3002.0	9410.3	13002.6	6976.0	3150.7
72.5°	528.9	527.3	551.6	632.4	685.8	752.1	1154.9	5272.9	7556.7	3330.3	1559.2
75°	409.2	425.4	456.1	528.9	561.3	545.1	626.0	1926.4	2707.6	1009.3	530.5
77.5°	320.2	333.2	360.7	431.8	464.2	386.5	360.7	689.0	870.2	362.3	239.3
80°	143.9	155.3	245.9	318.7	378.5	266.9	195.7	352.6	386.5	165.0	121.3
82.5°	25.8	43.7	143.9	168.2	194.1	173.0	101.9	182.8	189.2	66.3	42.0
85°	1.6	3.3	50.1	61.5	77.6	56.6	30.7	72.8	63.0	22.7	16.2
87.5°	0.0	0.0	0.0	1.6	1.6	8.1	9.7	12.9	9.7	8.1	6.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	6321.0	6321.0	6321.0	6321.0	6321.0	6321.0	6321.0	6321.0	6321.0	6321.0
2.5°	6219.1	5989.4	5766.1	5583.4	5476.7	5295.6	5175.8	5156.4	5106.2	5149.9
5°	6099.4	5688.5	5272.9	4900.8	4595.2	4200.6	3906.2	3781.5	3673.2	3710.4
7.5°	6042.8	5394.2	4747.2	4111.6	3458.1	2827.3	2358.2	2162.5	2013.7	2034.7
10°	5966.7	5088.5	4074.4	3103.9	2228.9	1606.1	1282.6	1163.0	1096.6	1098.3
12.5°	5908.5	4722.9	3293.1	2104.3	1357.0	1025.4	925.2	896.1	876.7	878.3
15°	5879.4	4292.7	2521.6	1402.3	970.5	868.6	844.3	831.4	818.5	816.8
17.5°	5830.9	3813.9	1845.5	1023.9	849.1	813.5	792.5	778.0	761.8	758.6
20°	5758.1	3270.5	1348.9	865.3	795.8	768.2	739.1	719.8	700.4	697.1
22.5°	5623.9	2696.3	1036.8	800.6	757.0	726.2	690.6	668.0	648.6	645.3
25°	5374.8	2157.6	873.4	760.2	723.0	685.8	647.0	616.2	598.5	595.2
27.5°	5059.4	1695.0	792.5	723.0	679.4	645.3	601.7	572.6	556.4	553.2
30°	4687.3	1305.2	745.7	680.9	627.6	598.5	559.6	535.4	525.6	525.6
32.5°	4286.2	1043.2	726.2	638.9	582.3	549.9	519.2	509.5	506.2	504.6
35°	3909.3	905.8	716.6	605.0	541.8	511.1	498.2	499.8	506.2	506.2
37.5°	3574.6	862.1	711.7	580.7	506.2	478.8	486.9	501.4	495.0	495.0
40°	3272.1	866.9	708.5	562.8	477.1	460.9	477.1	465.9	449.7	448.0
42.5°	3040.8	907.4	701.9	548.3	459.4	448.0	441.6	423.7	422.2	425.4
45°	2872.6	943.0	700.4	541.8	439.9	418.9	410.8	393.1	425.4	433.5
47.5°	2673.6	943.0	700.4	519.2	407.6	399.5	386.5	367.2	399.5	407.6
50°	2416.4	883.1	672.8	493.3	381.7	376.9	354.2	329.9	323.5	328.3
52.5°	2091.3	774.8	603.3	457.8	355.9	346.1	318.7	300.8	296.0	296.0
55°	1721.0	648.6	509.5	406.0	328.3	310.6	291.1	283.0	278.2	275.0
57.5°	1399.1	532.2	409.2	360.7	302.5	279.8	273.4	263.6	255.5	250.7
60°	1148.4	418.9	338.0	320.2	276.5	255.5	253.9	241.0	220.0	216.8
62.5°	886.3	307.3	284.6	278.2	250.7	232.9	229.7	203.8	171.5	165.0
65°	626.0	239.3	229.7	244.3	223.2	207.0	199.0	160.1	126.2	121.3
67.5°	439.9	200.6	181.1	213.5	194.1	173.0	168.2	135.9	105.2	101.9
70°	313.8	163.4	148.8	182.8	155.3	152.0	142.4	113.3	85.7	82.5
72.5°	221.6	124.5	114.8	158.5	106.7	131.0	116.4	87.3	64.7	61.5
75°	163.4	89.0	80.9	92.1	77.6	98.7	82.5	58.2	40.4	38.8
77.5°	119.7	56.6	48.5	45.3	45.3	61.5	45.3	24.3	17.8	16.2
80°	84.2	25.8	22.7	19.4	17.8	14.6	6.5	3.3	1.6	1.6
82.5°	50.1	11.3	11.3	8.1	4.8	0.0	0.0	0.0	0.0	0.0
85°	11.3	4.8	4.8	1.6	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	1.6	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)